

Appendix A

1. (Currently amended) A method of forming a material, said method comprising:
 - (a) providing at least one energy source;
 - (b) feeding a precursor material into a localized environment of the at least one energy source, to allow the at least one energy source to activate the precursor material within gasses and to direct the precursor material and the gasses along a first path;
 - ~~(c) directing the gasses along a first path;~~ and
 - (~~c~~d) providing at least one additional gas flow source ~~of pressure differential~~ and applying the at least one additional gas flow ~~source of pressure differential~~ to the ~~localized environment of the at least one energy source~~ first path gasses, such that the ~~localized environment is selectively changed to thereby~~ redirect the gasses from the first path to a redirected path, to thereby cause the gasses to contact a surface and form at least part of the material.
2. (Original) The method of claim 1, wherein causing the gasses to contact a surface includes contacting a substrate to form a coating of the material thereon.
3. (Original) The method of claim 2, wherein the coating is formed less than 5 microns in thickness.
4. (Original) The method of claim 2, wherein the coating is formed less than 0.5 microns in thickness.
5. (Withdrawn) The method of claim 1, wherein causing the gasses to contact a surface includes contacting a surface of a device for separating and collecting a powder of the material.
6. (Currently amended) A method of forming a material, said method comprising:
 - (a) providing at least one energy source;
 - (b) providing a liquid precursor material;
 - (c) feeding a liquid precursor material into a localized environment of the at least one energy source, to allow the at least one energy source to activate the precursor material within gasses;
 - (d) directing the gasses along a first path; and

(e) providing at least one source of pressure differential and applying the at least one source of pressure differential to the localized environment of the at least one energy source, such that the localized environment is selectively changed to redirect the gasses from the first path to a redirected path, to thereby cause the gasses to contact a surface and form at least part of the material ~~The method of claim 1, wherein the precursor material is a solution derived from a liquid.~~

7. (Original) The method of claim 6 ~~4~~, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 10%.

8. (Original) The method of claim 6 ~~4~~, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 30%.

9. (Original) The method of claim 6 ~~4~~, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 60%.

10. (Original) The method of claim 6 ~~4~~, wherein applying to the localized environment the at least one source of pressure differential includes diluting the gasses by at least 100%.

11. (Original) The method of claim 6 ~~4~~, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 10% compared to the temperature of the energy source relative to the temperature of the surface.

12. (Original) The method of claim 6 ~~4~~, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 25% compared to the temperature of the energy source relative to the temperature of the surface.

13. (Original) The method of claim 6 ~~4~~, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 50% compared to the temperature of the energy source relative to the temperature of the surface.

14. (Original) The method of claim 6 ~~4~~, wherein the change to the localized environment caused by providing the at least one source of pressure differential includes cooling the gasses by at least 70% compared to the temperature of the energy source relative to the temperature of the surface.

15. (Original) The method of claim 1, wherein the localized environment is within 20cm of the energy source.
16. (Original) The method of claim 1, wherein the localized environment is within 10cm of the energy source.
17. (Original) The method of claim 1, wherein the localized environment is within 5cm of the energy source.
18. (Original) The method of claim 1, wherein the localized environment is within 2cm of the energy source.
19. (Currently amended) The method of claim 6, wherein the localized environment comprises a pressurized environment having any pressure between 1-10,000 torr.
20. (Currently amended) A method of forming a material, said method comprising:
(a) providing at least one energy source;
(b) feeding a precursor material into a localized environment of the at least one energy source, to allow the at least one energy source to activate the precursor material within gasses;
(c) directing the gasses along a first path; and
(d) providing at least one source of pressure differential and applying the at least one source of pressure differential to the localized environment of the at least one energy source, such that the localized environment is selectively changed to redirect the gasses from the first path to a redirected path, to thereby cause the gasses to contact a surface and form at least part of the material ~~The method of claim 1, wherein the localized environment comprises an open atmosphere in an atmospheric environment.~~
21. (Currently amended) A method of forming a material, said method comprising:
(a) providing at least one energy source;
(b) feeding a precursor material within gasses, the gasses including liquid that is at least partially vaporized, into a localized environment of the at least one energy source, to allow the at least one energy source to activate the precursor material;
(c) directing the gasses along a first path; and
(d) providing at least one source of pressure differential and applying the at least one source of pressure differential to the localized environment of the at least one energy source, such that the localized environment is selectively changed to redirect the gasses

from the first path to a redirected path, to thereby cause the gasses to contact a surface and form at least part of the material ~~The method of claim 1, wherein the gasses include liquid that is at least partially vaporized.~~

22. (Currently amended) A method of forming a material, said method comprising:

(a) providing at least one combustion source;

(b) feeding a precursor material into a localized environment of the at least one combustion source, to allow the at least one combustion source to activate the precursor material within gasses;

(c) directing the gasses along a first path; and

(d) providing at least one source of pressure differential and applying the at least one source of pressure differential to the localized environment of the at least one combustion source, such that the localized environment is selectively changed to redirect the gasses from the first path to a redirected path, to thereby cause the gasses to contact a surface and form at least part of the material ~~The method of claim 1 wherein the at least one energy source comprises at least one combustion source.~~

23. (Original) The method of claim 22 + wherein providing at least one source of pressure differential comprises providing at least one source of pressurized fluid.

24. (Original) The method of claim 23 wherein the pressurized fluid is a gas.

25. (Original) The method of claim 24 wherein the pressurized gas is directed close to, but not directly at the at least one combustion energy source, thereby forming the pressure differential that redirects the gasses toward the surface.

26. (Original) The method of claim 24 wherein the pressurized gas intercepts the gas flow out of the at least one combustion energy source, thereby redirecting the gasses toward the surface.

27. (Original) The method of claim 23 wherein the pressurized fluid contains a liquid.

28. (Original) The method of claim 23 wherein:

(a) the pressurized fluid comprises an additional precursor; and

(b) the combustion energy source causes the additional precursor to react to create additional gasses that form at least part of the material.

29. (Original) The method of claim 23 wherein:

(a) the pressurized fluid comprises additional material; and

- (b) the additional material forms at least part of the formed material.
30. (Original) The method of claim 1 wherein the at least one energy source includes at least two energy sources.
31. (Original) The method of claim 22 + wherein the at least one source of pressure differential includes at least one source of vacuum.
32. (Original) The method of claim 22 + wherein the at least one source of pressure differential includes at least two sources of pressure differential.
33. (Original) The method of claim 32 wherein the at least two sources of pressure differential includes at least one source of vacuum and at least one source of pressurized fluid.
34. - 89. (Canceled)
90. (Withdrawn) A system for forming a material, comprising:
- at least one energy source;
 - means for directing a precursor material along a first path and into a localized environment of the at least one energy source, to allow the at least one energy source to activate the precursor within gasses;
 - means for providing at least one source of pressure differential and applying the at least one source of pressure differential to the localized environment of the at least one energy source, such that the localized environment is selectively changed to redirect the gasses from the first path to a redirected path, to thereby cause the gasses to contact a surface and form at least part of the material.
91. (Withdrawn) The system according to Claim 90, wherein said means for directing the precursor material along the first path comprises a nozzle.
92. (Withdrawn) The system according to Claim 90, wherein said at least one energy source comprises an ignition mechanism for igniting the precursor material and for vaporizing at least a portion of the precursor material.
93. (Withdrawn) The system according to Claim 90, wherein said means for providing at least one source of pressure differential comprises a redirect jet for creating a pressure differential along the first path to thereby redirect the at least partially vaporized material from the first path to the redirected path.

94. (Withdrawn) The system according to claim 93, wherein said redirect jet comprises a nozzle for directing a stream of gas at the at least partially vaporized material.

95. (Withdrawn) The system according to claim 94, further comprising a flow controller for adjusting a flow rate of the stream of gas being projected from the nozzle.

96. (Withdrawn) The system according to claim 93, wherein the redirect jet comprises a nozzle for applying a negative pressure to the at least partially vaporized material.

97. (Withdrawn) The system according to claim 93, wherein the redirect jet includes a pivot mechanism for adjusting an angle at which the redirect jet acts on the at least partially vaporized material.

98. (Withdrawn) The system according to claim 93, further including a controller for adjusting a relative mix of at least partially vaporized precursor material and a gas being delivered from the redirect jet.

99. (New) The method of claim 21, wherein the localized environment comprises a pressurized environment having any pressure between 1-10,000 torr.

100. (New) The method of claim 22, wherein the localized environment comprises a pressurized environment having any pressure between 1-10,000 torr.